



EPA Region 5 Records Ctr.



295695

March 10, 2004

FOLEY & LARDNER LLP
ATTORNEYS AT LAW

777 EAST WISCONSIN AVENUE
MILWAUKEE, WISCONSIN 53202-5306
414.271.2400 TEL
414.297.4900 FAX
www.foley.com

WRITER'S DIRECT LINE
414.297.5881
lkridner@foley.com EMAIL

CLIENT/MATTER NUMBER
074830-0109

Via FedEx

William J. Ryczek
Emergency Enforcement & Support Section (SE-5J)
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Response to Request for Information Pursuant to Section 104
of CERCLA for RRG/Clayton Chemical Company Superfund
Site, 1 Mobile Avenue, Sauget, St. Clair County, Illinois

Dear Mr. Ryczek:

Enclosed please find Sigma Chemical Company, n/k/a/ Sigma-Aldrich Co.'s ("Sigma-Aldrich Co.") response to the United States Environmental Protection Agency's ("U.S. EPA") Request for Information Pursuant to 42 U.S.C. § 9601, *et seq.*, for the RRG/Clayton Chemical Company Superfund Site, 1 Mobile Avenue, Sauget, St. Clair County, Illinois ("Information Request"), dated January 28, 2004. The Information Request was received by Sigma-Aldrich Co. on January 30, 2004; pursuant to an agreement with U.S. EPA, Sigma-Aldrich Co. is providing only a partial response today. Sigma-Aldrich Co. intends to provide responses to the remainder of the Information Request by April 9, 2004.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Leah M. Krider

Enclosures

cc: George R. Bleazard
Mark A. Thimke

BRUSSELS
CHICAGO
DENVER

DETROIT
JACKSONVILLE
LOS ANGELES
MADISON

MILWAUKEE
ORLANDO
SACRAMENTO
SAN DIEGO

SAN DIEGO/DEL MAR
SAN FRANCISCO
SILICON VALLEY
TALLAHASSEE

TAMPA
TOKYO
WASHINGTON, D.C.
WEST PALM BEACH

001.1589847.1

**SIGMA CHEMICAL COMPANY, N/K/A SIGMA-ALDRICH CO.
RESPONSE TO REQUEST FOR INFORMATION
PURSUANT TO SECTION 104 OF CERCLA
FOR THE RRG/CLAYTON CHEMICAL COMPANY SUPERFUND SITE,
1 MOBILE AVENUE, SAUGET, ST. CLAIR COUNTY, ILLINOIS**

MARCH 10, 2004

Sigma Chemical Company, n/k/a/ Sigma-Aldrich Co. ("Sigma-Aldrich Co.") has received and reviewed the United States Environmental Protection Agency's ("U.S. EPA") Request for Information Pursuant to 42 U.S.C. §§ 9601, *et seq.*, for the RRG/Clayton Chemical Company Superfund Site, 1 Mobile Avenue, Sauget, St. Clair County, Illinois ("Information Request"), dated January 28, 2004. The Information Request was received by Sigma-Aldrich Co. on January 30, 2004; pursuant to an agreement with U.S. EPA, Sigma-Aldrich Co. received an extension to provide this response. Sigma-Aldrich Co. is in the process of investigating its potential relationship to the Site. Therefore, Sigma-Aldrich Co. is providing only a partial response today.

This Response is based upon information currently available to Sigma-Aldrich Co. Sigma-Aldrich Co. is conducting a diligent investigation of its business records and interviewing appropriate employees. Sigma-Aldrich Co. reserves the right to revise, amend and/or update this Response in the future if Sigma-Aldrich Co. obtains additional relevant or responsive information. Sigma-Aldrich Co. objects to the Information Request to the extent that it seeks privileged information or information beyond the scope of U.S. EPA's legal authority. Without waiving these objections, or any of the objections identified below, Sigma-Aldrich Co. responds to the Information Request as follows:

REQUEST NO. 1

Identify all persons consulted in the preparation of the answers to these Information Requests.

Response No. 1

George R. Bleazard
Corporate Director, Environmental, Compliance, Health and Safety
Sigma-Aldrich Co.
P.O. Box 14508
Saint Louis, MO 63178

REQUEST NO. 2

Identify all documents consulted, examined, or referred to in the preparation of the answers to these Requests, and provide copies of all such documents.

Response No. 2

Any documentation referenced in preparing this response is identified in response to the relevant request.

REQUEST NO. 4

Identify all persons having knowledge or information about the generation, transportation, treatment, disposal, or other handling of hazardous substances by you, your contractors or any other person at the Site.

Response No. 4

Sigma-Aldrich Co. is currently in the process of identifying individuals who may have knowledge regarding activities at the Site.

REQUEST NO. 5

Identify all persons having knowledge or information about a dedicated storage facility or tank used by you, your contractors, or any other persons at the Site for materials sent by you to this Site.

Response No. 5

Sigma-Aldrich Co. is currently in the process of identifying individuals who may have knowledge regarding activities at the Site.

REQUEST NO. 6

Identify the hazardous substances you or your contractors or any other persons either used, generated, stored, treated, disposed, processed, transported, or otherwise handled at the Site, including:

- (a) The chemical composition, characteristics, physical state (e.g., solid, liquid) of each hazardous substance;*
- (b) Who supplied you with such hazardous substances;*
- (c) How such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you;*
- (d) When such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you;*
- (e) Where such hazardous substances were used, purchased, generated, stored, treated, transported, disposed, or otherwise handled by you; and*
- (f) The quantity of such hazardous substances used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you.*
- (g) Provide any information concerning the hazardous substances supplied or generated by Respondent to the Site for treatment, storage, disposal or transport.*

Response No. 6

As part of its resource conservation efforts, Sigma-Aldrich Co. performed solvent recovery operations at the Site from approximately 1974 to the late-1980s or early 1990s. During that period, the materials sent to the Site for solvent reclamation by Sigma-Aldrich Co. were primarily acetone, methanol and ethanol. Based upon information and

belief, Sigma-Aldrich Co. did not send any materials to or otherwise handle any materials at the Site containing chlorinated volatile organic compounds, PCBs, or heavy metals. All materials handled by Sigma-Aldrich Co. were from its own operations and facilities. Sigma-Aldrich Co. did not handle any third party waste or materials.

REQUEST NO. 8

Identify all persons, including yourself, who may have arranged for disposal or treatment or arranged for transportation for disposal or treatment of waste materials, including hazardous substances, at the Site or to the Site or [transshipment Site]. In addition, identify the following:

- (a) The persons with whom you or such other persons made such arrangements, including, but not limited to a listing of all transporters;*
- (b) Every date on which such arrangements took place;*
- (c) For each transaction, the nature of the waste material or hazardous substance, including the chemical content, characteristics, physical state (e.g., solid, liquid) and the process for which the substance was used or the process which generated the substance;*
- (d) The owner of the waste materials or hazardous substances so accepted or transported;*
- (e) The quantity of the waste materials or hazardous substances involved (weight or volume) in each transaction and the total quantity for all transactions;*
- (f) All tests, analyses, and analytical results concerning the waste materials;*
- (g) The person(s) who selected the Site [or transshipment Site] as the place to which the waste materials or hazardous substances were transported;*
- (h) The amount paid in connection with each transaction, the method of payment, and the identify of the person from whom payment was received;*
- (i) Where the person identify in g. above intended to have such hazardous substances or waste materials transported and all evidence of this intent;*
- (j) Whether the waste materials or hazardous substances involved in each transaction were transshipped through, or were stored or held at, any intermediate site prior to final treatment or disposal;*
- (k) What was actually done to the waste materials or hazardous substances once they were brought to the Site;*
- (l) The final disposition of each of the waste materials or hazardous substances involved in such transactions;*
- (m) The measures taken by you to determine the actual methods, means, and site of treatment or disposal of the waste material and hazardous substances involved in each transaction;*
- (n) The type and number of containers in which the waste materials or hazardous substances were contained when they were accepted for transport, and subsequently until they were deposited at the Site, and all markings on such containers;*
- (o) The price paid for (i) transport or (ii) disposal of (iii) [sic] or both, of each waste material and hazardous substance;*

Response No. 8

Sigma-Aldrich Co. lacks any independent knowledge of persons who may have sent materials to the Site. Sigma-Aldrich Co. only handled its own materials in its solvent recovery operations at the Site.

REQUEST NO. 9 & 10

The Information Request did not include Request Nos. 9 and 10.

REQUEST NO. 11

Describe the nature of your activities or business at the Site, with respect to purchasing, receiving, processing, storing, treating, disposing, or otherwise handling hazardous substances or materials at the Site.

Response No. 11

See Response No. 6. Information pertaining to Sigma-Aldrich Co.'s solvent recovery operations and procedures are identified as document numbers S/A-000001 to S/A-000008.

REQUEST NO. 12

State the dates during which you owned, operated, or leased the Site, and provide copies of all documents evidencing or relating to such ownership, operation, or lease arrangement (e.g., deeds, leases, etc.).

Response No. 12

As part of the parties contractual arrangement, from approximately 1974 until the late 1980s, Clayton Chemical Company provided Sigma-Aldrich Co. with a 20' x 40' portion of the Site upon which Sigma-Aldrich Co. conducted its solvent recovery operations. Contractual agreements between the two parties indicating this arrangement are identified as document numbers S/A-000009 to S/A-000020.

RESPONSE NO. 13

Describe and document all financial, business and legal relationships between Clayton Chemical Co., and RRG, Clayton Chemical Co. Acquisition, LLC, Specialty Waste, Environmental Operations, Inc., and the individual partners, members, officers and managing or operating boards of these entities.

Response No. 13

Based upon information and belief, Sigma-Aldrich Co. had a business relationship with Clayton Chemical Co. from approximately 1974 until the late-1980s or early 1990s.

Sigma-Aldrich Co. did not have any business or legal relationships with RRG, Clayton Chemical Co. Acquisition, LLC, Specialty Waste, or Environmental Operations, Inc.

Documents responsive to this request are identified as document numbers S/A-000009 to S/A-000020.

AFFIDAVIT OF GEORGE R. BLEAZARD

STATE OF MISSOURI)
)
CITY OF ST. LOUIS)


George R. Bleazard, being first duly sworn on oath, states as follows;

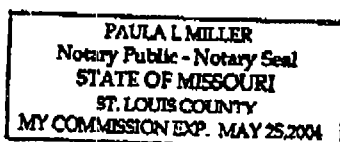
1. I am an adult resident of the State of Missouri and reside at 17109 Lafayette Trails Court, Wildwood, Missouri 63038.
2. I am the Corporate Director for Environmental Compliance, Health and Safety for Sigma-Aldrich Corporation located at 545 South Ewing Avenue, St. Louis, Missouri.
3. I make this affidavit in support of Sigma-Aldrich Co.'s Response to the U.S. EPA's Request for Information Pursuant to Section 104 of CERCLA for the RRG/Clayton Chemical Company Superfund Site, St. Clair County, Illinois dated January 28, 2004 ("Information Request").
4. Sigma-Aldrich Co. is in the process of conducting a diligent record search and a diligent interviewing process with employees who may have relevant knowledge regarding the activities that are the subject of the Information Request.
5. To the best of my knowledge, based on the information currently available to Sigma-Aldrich Co., this response is true, correct and accurate. Sigma-Aldrich Co. reserves the right to revise, amend and/or update this response in the future if Sigma-Aldrich Co. obtains additional relevant or responsive information.
6. This was prepared with the advice and assistance of Counsel.


George R. Bleazard
Corporate Director, Environmental, Compliance, Health & Safety

Subscribed and sworn to before me

This 1st day of March, 2004.


NOTARY PUBLIC, State of Missouri
My Commission is/expires 5/25/04



SOLVENT RECOVERY -- PROJECT 188

OPERATING INSTRUCTIONS

1. The ¹⁸⁸ area is a hard hat area.
 2. Containment of tank area will not meet requirements of standards.
- P. Wilson* 7/17/74

S/A-000001

Solvent Recovery -- Project 188

Operating Instructions

Table of Contents

Item	Page
Emergency Procedures	1
Nitrogen Purging Procedures	2
Start Up Procedures	2
Shutdown Procedures	4
Solvent Transfer Operations	4

S/A-000002

Solvent Recovery--Project 188

Operating Instructions

EMERGENCY PROCEDURES:

Emergency Requiring Total and Rapid Shutdown of Plant:

- A. Access to Reboiler not possible
 - 1. Climb platform ladder and shut off main steam valve.
 - 2. Shut off main power disconnect at panel board in front of boiler house.
- B. Access to Reboiler and main steam shut off valve not possible
 - 1. Notify Clayton Chemical personnel and have steam valves at discharge of each boiler closed.
 - 2. Shut off main power disconnect at panel board in front of boiler house.

Emergency -- Cooling Water Low Pressure

- 1. Shut off steam to Reboiler and to Reflux Heater.
- 2. Switch to total reflux.
- 3. Check with Clayton Chemical personnel to determine how long well water supply will be down.
- 4. When Condensate Receiver is empty shut off Reflux Pump.
- 5. Purge with nitrogen as soon as Reboiler pressure drops to zero.

Emergency -- Reflux Pump Stops

- 1. If Condensate Receiver is not yet full, reset heaters in Reflux Pump starter and attempt to restart the pump.
CAUTION: TURN OFF POWER SWITCH AT STARTER BEFORE OPENING BOX TO RESET HEATERS
If pump will not restart, or if Condensate Receiver is full shutdown as follows:
- 2. Shut off steam to Reboiler and Reflux Heater.
- 3. Shut off Feed Pump.
- 4. When Reboiler pressure drops to zero purge with nitrogen.
CAUTION: If Condensate Receiver is full the atmospheric vent line may be blocked with liquid solvent. Do not permit pressure in Reboiler to exceed 3 psig when purging. Continue nitrogen flow for 10 minutes, adjusting as necessary to limit pressure to 3 psig.

*Revised
7/17/74*

Operating Instructions (cont.)

Emergency Telephone Numbers:

FIRE DEPARTMENT ----- 332-6600
POLICE DEPARTMENT ----- 332-6500

Emergency --- Fire:

1. Notify Clayton Chemical employees that there is a fire and have them assist in fighting fire and ~~contacting fire department if necessary. If in doubt~~ Call fire department IMMEDIATE
2. Grab nearest chemical powder extinguisher and begin to extinguish fire. Use judgment regarding need for use of water fire hose.

Emergency --- Solvent Spill but NO Fire:

1. Clear area immediately of personnel.
2. Dilute with large quantities of water using hose from well water line and if necessary the fire hose.
3. Use judgement regarding need to shut down the plant.

Notify R. Wilson of all operation emergencies in writing within 24 hours or where damage or injury is involved by phone immediately

*R. Wilson
7/17/74*

Operating Instructions (cont.)

NITROGEN PURGING PROCEDURES:

Purging When Reboiler Is Empty:

1. Open drain valve at bottom of Reboiler level gage and open valve at bottom of Reboiler.
2. Begin flow of nitrogen at 20% setting on rotameter (approx. 15 scfm).
3. After 5 minutes close valve at bottom of Reboiler and close valve at bottom of Reboiler level gage. Then open drain valve at Reflux Pump and at bottom of Condensate Receiver. Continue purge for an additional 5 minutes. Then close Reflux Pump drain valve.

Purging When Reboiler Is Full:

1. Begin flow of nitrogen at 20% setting on rotameter (approx. 15 scfm).
2. Open valve at bottom of Condensate Receiver and open drain valve at Reflux Pump.
3. Purge for 7 minutes at 20% setting on rotameter.

Purging During Shutdown Of System:

1. When Reboiler pressure drops to zero start flow of nitrogen at 20% setting on rotameter.
2. When Condensate Receiver is empty close valves to product rotameter and reflux rotameter, and open drain valve at Reflux Pump.
3. Total purging time required is 7 minutes.

START UP PROCEDURES:

1. Purge with nitrogen according to detailed procedure given above.
2. Turn on cooling water
 - a. Open by-pass valve around Cooling Water Pump.
 - b. Close all other valves in water line.
 - c. Open main water valve full open.
 - d. Open valves at water rotameter and set flow rate at 70 gpm.
3. Fill Reboiler with waste solvent
 - a. Shut valves in feed line from Feed Pump to Reboiler.
 - b. Open valve at bottom of Waste Storage Tank.
 - c. Start Feed Pump.
 - d. Open discharge valve at Feed Pump.
 - e. Open both valves at Reboiler to give maximum flow through the rotameter, and open valve in by-pass line around rotameter.
 - f. When Reboiler is full close valves in feed line and shut-off feed pump.
4. Start Agitator
5. Begin steam flow at 10 psig on both coils
 - a. Place platform ladder below main steam shut-off valve and secure firmly to steam piping.
 - b. Close steam valves at side of Reboiler and check that

S/A-000005

Operating Instructions (cont.):

- all drain valves in steam line between Reboiler and main shut-off valve are closed. Close strainer blow-down valves in steam condensate discharge lines.
- c. Open main steam valve full open.
 - d. Open by-pass valve around flow control valve.
 - e. Open valves to both upper and lower steam coils; adjust pressure to 10 psig on each coil.
6. Close inlet valves to both product and reflux rotameters, and close both by-pass valves.
 7. When Condensate Receiver liquid level reaches 60 gallons start Reflux Pump and open valve to reflux rotameter. Adjust flow rate through reflux rotameter to maintain a constant 50 gallon level in the Condensate Receiver.
 8. Start steam to Reflux Heater. Maintain 53 degrees C. discharge temperature when recovering acetone.
 9. Turn off Agitator.
 10. Adjust steam flow to Reboiler until flow rate on total reflux is 7.0 on the rotameter (actual flow of acetone is 9.0 gpm).
 11. Operate on total reflux until product is within specifications. Take samples every 15 minutes after starting reflux pump.
 12. When product is within specifications open valve to one Product Receiver and close valve to the other Product Receiver. Begin flow to Product Receiver at a reading of 2.4 (3 gpm actual) on the product rotameter.
 13. Continue to sample every 60 minutes.
 14. Be sure valves in waste feed line at Reboiler are closed then start Feed Pump. Open valve in recycle line at Feed Pump. Adjust flow through rotameter at Reboiler to a reading of 2.4 (3 gpm actual).
 15. When temperature of liquid in Reboiler reaches 95 degrees C. pump 50 gallons to the Bottoms Storage Tank.
 - a. Start Agitator.
 - b. Open inlet valve to Bottoms Pump.
 - c. Start Bottoms Pump.
 - d. Open valve in line to Bottoms Storage Tank.
 - e. Pump until liquid level in Reboiler drops 4 inches (approx. 50 gallons)
 - f. Shut off Agitator and Bottoms Pump and close valves.
 16. Increase feed rate to Reboiler to a reading of 3.2 on rotameter (approx. 4.0 gpm actual).
 17. Pump out bottoms from Reboiler every hour thereafter to maintain proper operating levels.

S/A-000006

Revised
7/17/74

Operating Instructions (cont.)

SHUTDOWN PROCEDURES:

1. Turn off Feed Pump. Close valve at bottom of Waste Storage Tank. Close valve at inlet to feed rotameter at Reboiler.
2. Empty Condensate Receiver by opening by-pass valve to Product Receiver.
3. Shut off steam to Reboiler and Reflux Heater.
4. Stop product flow and operate on total reflux.
5. When pressure in Reboiler drops to zero begin purging with nitrogen according to the detailed instructions for purging.
6. When Condensate Receiver is empty shut off Reflux Pump.
7. Drain bottom of Column into Reboiler via Bottoms Pump.
8. Close main steam shut-off valve and drain steam and condensate from lines to Reboiler and Reflux Heater.

SOLVENT TRANSFER OPERATIONS:

Receiving Waste Solvent:

1. Position trailer so that outlet valve is near Feed Pump.
2. Connect ground wire to trailer.
3. Connect hose from fill line directly to trailer if trailer has its own pump. Then open valves and begin transfer of waste solvent.
4. If trailer is not equipped to pump then use Feed Pump.
 - a. Connect hose from trailer outlet to inlet of Feed Pump. Connect outlet of Feed Pump to Waste Storage Tank fill line.
 - b. Close valve in feed line to Reboiler (located just above Feed Pump).
 - c. Close bottom outlet valves from all Waste Storage Tanks. Close all valves in drain lines at bottom of level gages on Waste Storage Tanks.
 - d. Open valve in feed line to Feed Pump from trailer. Open valve in Waste Storage Tank fill line.
 - e. Start Feed Pump.
 - f. Open discharge valve at Feed Pump.
5. CAUTION: Truck driver should remain at trailer if trailer is being unloaded with self contained pump.

Loading Product Into Transport Trailer:

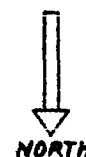
1. Position trailer along north side of concrete pad next to Product Receivers.
2. Connect grounding clamp to trailer.
3. Attach hose between Product Pump discharge and trailer.
4. Open inlet valve to Product Pump.
5. Start Product Pump.
6. Open discharge valve at Product Pump.

S/A-000007

Product Out Of Specification -- Pump product to Waste Storage Tank

1. Connect hose from Product Pump to Waste Storage Tank fill line.
2. Open inlet valve to Product Pump and inlet valve to Waste Storage Tank (discharge valve at Product Pump is closed).
3. Start Product Pump.
4. Open discharge valve at Product Pump.

approved as 7/17/74
Reboiler
7/17/74



2/1/23

S/A-000008

1	ADDED WATER PUMP AND BOTTOMS STRAINER TO	4-27-74
REF	DESCRIPTION	DATE
SIGMA CHEMICAL COMPANY		
SOLVENT RECOVERY		
PLOT PLAN - PROJ. 100		
LOCATION:		
MOBILE AVE., SALTET, ILL.		
OWN BY: FTS	TIME AM	10:00
SIGMA CHEMICAL	MINSP	1



Clayton Chemical Co.

Original in F. Hoffmann's file.

Contract for 1985 to 1986

APR 10 '85 PR

To: JERRY KASKOWITZ

FAS

12-15-86

FIXED property
included DC 12/15/86
4 pages

This agreement is between Sigma Chemical Company and Clayton Chemical Company, and concerns the installation and operation of a distillation system to recover, Sigma Chemical generated, solvents. In particular the responsibilities are divided as follows:

Item	'Sigma'	'Clayton'
	<u>Sigma Chemical Company</u>	<u>Clayton Chemical Company</u>
<u>Distillation System</u> <u>Installation & Maintenance</u> Site	None	will provide a site for a cement pad approx. 20'x40' and a site for the installation of distillation system as per the attached drawing supplied by Sigma
Materials	will supply all materials necessary for the construction, installation, and maintenance of the distillation system	None
Construction and/or modifications and/or maintenance	personnel may participate in the construction and/or modifications and/or maintenance of the distillation system	will supply labor at \$15.00 per man hour to install & or modify and/or maintain the distillation system at the direction of Sigma
Liability	will be responsible for the safe operation of the distillation system and will assume liability for the operation of the distillation system. Clayton waives all rights to recover from Sigma in the event of damage caused to Clayton property and/or personnel by the distillation system	shall take the same care in providing security and protection from outside parties for the distillation system, chemicals & materials as Clayton does for their own equipment, chemicals and materials. Sigma waives all rights to recover from Clayton in the event of damage caused to Sigma property and/or personnel by Clayton operations

Item

Sigma

Clayton

Distillation System
Operation

to give 24 hour or more notice to operate the distillation system. Clayton will make every reasonable efforts to respond to this request

will supply steam, electricity and cooling water necessary for the operation of the distillation system barring unforeseen equipment failures or an act of God. Clayton will provide a sewer for cooling water and condensate. If there are interruptions in the utilities supplied to the distillation system every reasonable effort will be made by Clayton to promptly restore these services

Personnel

will provide sufficient personnel necessary for the operation of the distillation system. Such personnel will be under the direction of Sigma Chemical

will provide sufficient personnel to maintain all utilities necessary for the operation of the distillation system. Such personnel will be under the direction of Clayton

I. Termination of
Distillation System
Operation

reserves the right to terminate this agreement upon 60 days written notice to Clayton. If Sigma exercises this option, Sigma will dismantle and remove the distillation system. If Sigma chooses not to remove the system Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system

reserves the right to terminate this agreement upon 60 days written notice to Sigma, If Clayton exercises this option, then: a) minimum yearly charges (see below) will be waived, and b) Sigma will dismantle and remove the distillation system. If Sigma chooses not to remove the system, Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system



APR 10 '85 PR.

The following charges apply for operation during normal business hours of Clayton Chemical, 8am to 4pm, Monday thru Friday, except for normal Clayton Chemical holidays.

Sigma Chemical agrees to pay Clayton Chemical for the use of the plant space and utilities services supplied by Clayton at a charge of \$24.0 per shift or fraction thereof for operation of the distillation system. Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of 16 ¢/gal. of acetone and 32¢/gal. of alcohol.

The following charges apply for operation beyond normal business hours.

Sigma Chemical agrees to pay Clayton Chemical for the use of plant space and utilities services supplied by Clayton at a charge of \$41.6 per shift or fraction thereof for operation of the distillation system, and in addition Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of 32¢ per gallon.

Should Clayton Chemical be working beyond normal business hours, then Sigma Chemical will be permitted to operate the distillation system for the normal business hours charges. Should Sigma Chemical require additional processing time at the end of the normal business hours to complete a distillation operation the Sigma Chemical may be permitted up to one (1) hour extended operation at the rate of \$60 per hour plus normal gallonage charge. The additional processing time will not be permitted when the Clayton Plant requires block down for overnight freeze protection, as determined by Clayton.

Clayton will submit to Sigma Chemical a monthly report, in the form attached, for all charges occurring during the previous month by the 5th of the month. Sigma Chemical will remit to Clayton Chemical payment in full within 10 days after receipt of the report.

Sigma guarantees to pay Clayton a minimum fee of \$6,000 per year for the operation of the distillation system. Should the total operation charges (shift fee plus gallon charges) not equal or exceed \$6,000, Sigma will pay the difference at the conclusion of the one year period.

Any amount due on the yearly minimum charges will be paid by the 10th day of the month following the conclusion of the 12 month period.

Should Sigma Chemical terminate this agreement, Sigma agrees to pay Clayton Chemical an amount equal to the yearly minimum charges of \$6,000 less the cumulative charges paid to Clayton Chemical thru the date of termination of operations.

This agreement between Clayton Chemical and Sigma Chemical is renewed automatically at the conclusion of each 12 month period unless termination notice is given in accordance with the provisions set forth in the section on termination.

If the above meets with your approval, please sign one copy and return.

Agreed B.R. Hanes
B.R. Hanes
Clayton Chemical Co.
Date 3-13-85

Agreed Fred Shaffstall
Tom Cori or Fred Shaffstall
Sigma Chemical Co.
Date 4-18-85

S/A-000011

Suggested Billing Form by Clayton Chemical

Charges for operation of the distillation system

To Sigma Chemical Company:

During the month of _____, 198____, Sigma Chemical Company operated the distillation system as follows:

1. On the following dates _____, the distillation system was operated during normal business hours. The total number of normal business hour shifts was _____. The charge is \$240.00 per shift. This total is _____ x \$240. = \$_____.
2. On the following dates: _____, the distillation system was operated beyond normal business hours. The total number of shifts beyond normal business hours was _____. The charge is \$416.00 per shift. The total is _____ x \$416. = \$_____.

3. Gallons of product shipped from Clayton

On	Date	Acetone	SIS	Other

Total gallons acetone _____ x 16cents per gal. = \$_____

Total gal SIS _____ x 32 cents per gal. = \$_____

Total gal other _____ x _____ cents per gal. = \$_____

Total gallonage charges = \$_____.

4. _____ hours of labor were supplied by Clayton @ \$15.00 per man hour. The total is _____ x \$15.00 = \$_____.
5. Charges for additional processing time @ \$60.00 per hour. The total number of hours was _____. The total is _____ x \$60.00 = \$_____.
6. Summary of above charges:

Item 1. is \$ _____.

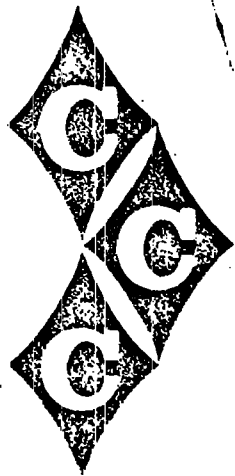
Item 2. is \$ _____.

Item 3. is \$ _____.

Item 4. is \$ _____.

Total is \$ _____.

The total billing for the month of _____ is \$_____.



Clayton Chemical Co.

P/C > T.C, Y.K. 7/30/79
Jr.
07/1/79 3

Contract for to

This agreement is between Sigma Chemical Company and Clayton Chemical Company, and concerns the installation and operation of a distillation system to recover, Sigma Chemical generated, solvents. In particular the responsibilities are divided as follows:

<u>Item</u>	<u>'Sigma'</u>	<u>'Clayton'</u>
	<u>Sigma Chemical Company</u>	<u>Clayton Chemical Company</u>
I. <u>Distillation System</u> <u>Installation & Maintenance</u>	None	will provide a site for a cement pad approx. 20'x 4 and a site for the installation of distillation system as per the attache drawing supplied by Sigma
Site		
Materials	will supply all materials necessary for the construction, installation, and maintenance of the distillation system	None
Construction and/or modifications and/or maintenance	personnel may participate in the construction and/or modifications and/or maintenance of the distillation system	will supply labor at \$15 per man hour to install and or modify and/or maintain the distillation system in the direction of Sigma
Liability	will be responsible for the safe operation of the distillation system and will assume liability for the operation of the distillation system. Clayton waives all rights to recover	shall take the same care providing security and protection from outside parties for the distillation system, chemicals and materials as Clayton does for their own equipment, chemicals and materials. Sigma

S/A-000013

<u>Item</u>	<u>Sigma</u>	<u>Clayton</u>
continue.. Liability	from Sigma in the event of damage caused to Clayton property and/or personnel by the distillation system	waives all rights to recover from Clayton in the event of damage caused to Sigma property and/or personnel by Clayton operations
II. <u>Distillation System Operation</u> Utilities	to give 24 hour or more notice to operate the distillation system. Clayton will make every reasonable effort to respond to this request	will supply steam, electricity and cooling water necessary for the operation of the distillation system barring unforeseen equipment failures or an act of God. Clayton will provide a sewer for cooling water and condensate. If there are interruption in the utilities supplied to the distillation system every reasonable effort will be made by Clayton to promptly restore these services
Personnel	Will provide sufficient personnel necessary for the operation of the distillation system. Such personnel will be under the direction of Sigma Chemical	will provide sufficient personnel to maintain all utilities necessary for the operation of the distillation system. Such personnel will be under the direction of Clayton
III. <u>Termination of Distillation System Operation</u>	reserves the right to terminate this agreement upon 60 days written notice to Clayton. If Sigma exercises this option, Sigma will dismantle and remove the distillation system or Clayton will, at the direction of Sigma dismantle the distillation system at the rate of \$15/man hour. If Sigma chooses not to remove the system Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system	reserves the right to terminate this agreement upon 60 days written notice to Sigma. If Clayton exercise this option, then: a) minimum yearly charges (see below) will be waived, and b) Sigma will dismantle and remove the distillation system. If Sigma chooses not to remove the system, Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system

The following charges apply for operation during normal business hours of Clayton Chemical, 8am to 4pm, Monday thru Friday, except for normal Clayton Chemical holidays.

Sigma Chemical agrees to pay Clayton Chemical for the use of the plant space and utilities services supplied by Clayton at a charge of \$240 per shift or fraction thereof for operation of the distillation system. Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of 13¢/gal. of acetone and 26¢/gal. of alcohol.

The following charges apply for operation beyond normal business hours.

Sigma Chemical agrees to pay Clayton Chemical for the use of plant space and utilities services supplied by Clayton at a charge of \$416 per shift or fraction thereof for operation of the distillation system, and in addition Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of 26¢ per gallon.

Should Clayton Chemical be working beyond normal business hours, then Sigma Chemical will be permitted to operate the distillation system for the normal business hours charges. Should Sigma Chemical require additional processing time at the end of the normal business hours to complete a distillation operation the Sigma Chemical may be permitted up to one (1) hour extended operation at the rate of \$60 per hour plus normal gallonage charge. The additional processing time will not be permitted when the Clayton Plant requires blow down for overnight freeze protection, as determined by Clayton.

Clayton will submit to Sigma Chemical a monthly report, in the form attached, for all charges occurring during the previous month by the 5th of the month. Sigma Chemical will remit to Clayton Chemical payment in full within 10 days after receipt of the report.

Sigma guarantees to pay Clayton a minimum fee of \$6,000 per year for the operation of the distillation system. Should the total operation charges (shift fee plus gallon charges) not equal or exceed \$6,000, Sigma will pay the difference at the conclusion of the one year period.

Any amount due on the yearly minimum charges will be paid by the 10th day of the month following the conclusion of the 12 month period.

Should Sigma Chemical terminate this agreement, Sigma agrees to pay Clayton Chemical an amount equal to the yearly minimum charges of \$6,000 less the cumulative charges paid to Clayton Chemical thru the date of termination of operations.

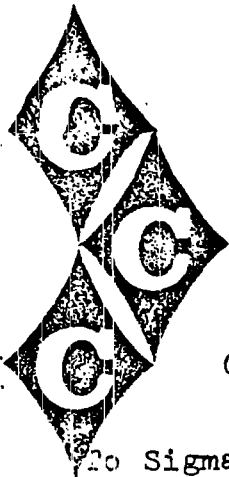
This agreement between Clayton Chemical and Sigma Chemical is renewed automatically at the conclusion of each 12 month period unless termination notice is given in accordance with the provisions set forth in the section on termination.

S/A-000015

If the above meets with your approval, please sign one copy and return.

Agreed *[Signature]*
Ed. Reilly B. HANEY
Clayton Chemical Co.

Agreed *[Signature]*
Tom Corbett FRED A. SHAFSTALL
Sigma Chemical Co.



Clayton Chemical Co.

Charges for the operation of the Distillation System

To Sigma Chemical:

During the month of _____, 19__, Sigma Chemical operated the distillation system as follows:

1. On the following dates: _____, the distillation system was operated during normal business hours. The total number of normal business hour shifts was _____. The charge is \$240 per shift. The total is _____ x \$240 = \$_____.

2. On the following dates: _____, the distillation system was operated beyond normal business hours. The total number of shifts beyond normal business hours was _____. The charge is \$416 per shift. The total is _____ x \$416 = \$_____.

3. On _____ date _____ gallons of finished products were shipped from Clayton

total gallons _____ x _____ per gallon = \$_____.

4. _____ hours of labor were supplied by clayton @ \$15 per man hour. The total is _____ x \$15 = \$_____.

5. Charges for additional processing time @ \$60 per hour. The total number of hours was _____. The total is _____ x \$60 = \$_____.

6. Item 1 is \$ _____

7. Item 2 is \$ _____

8. Item 3 is \$ _____

9. Item 4 is \$ _____

10. Item 5 is \$ _____

The total billing for the month of _____ is \$_____.

Contract for 1978 - 12 months - 1979

December 14, 1973

-1-

Mr. Bud Honey
Clayton Chemical Company
Mobile Avenue
Saugst, Illinois

Dear Mr. Honey:

This agreement is between Sigma Chemical Company and Clayton Chemical Company, and concerns the installation and operation of a distillation system to recover Sigma Chemical generated solvents. In particular the responsibilities are divided as follows:

Item	Sigma (Sigma Chemical Company)
I. <u>Distillation System</u> <u>Installation & Maintenance</u>	
Site	None
Materials	will supply all materials necessary for the construction, installation, and maintenance of the distillation system.
Construction and/ or modifications and/or maintenance	personnel may participate in the construction and/or modifications and/or maintenance of the distillation system.
Liability	will be responsible for the safe operation of the distillation system and will assume liability for the operation of the distillation system. Clayton waives all rights to recover from Sigma in the event of damage caused to Clayton property and/or personnel by the distillation system.

Clayton (Clayton Chemical Company)

will provide a site for a cement pad approx 20' x 40' and a site for the installation of distillation system as per the attached drawing supplied by Sigma.

none

will supply labor at \$8.00 per man hour to install and/or modify and/or maintain the distillation system at the direction of Sigma.

shall take the same care in providing security and protection from outside parties for the distillation system, chemicals and materials as Clayton does for their own equipment, chemicals and materials. Sigma waives all rights to recover from Clayton in the event of damage caused to Sigma property and/or personnel by Clayton operations.

S/A-000017

Item	Sigma (Sigma Chemical Company)
<p>II. <u>Distillation System Operation</u></p> <p>Personnel</p>	<p>will provide sufficient personnel necessary for the operation of the distillation system. Such personnel will be under the direction of Sigma Chemical.</p>
<p><u>Distillation System Operation</u></p> <p>Utilities</p>	<p>to give 24 hours or more notice to operate the distillation system. Clayton will make every reasonable effort to respond to this request.</p>
<p>III. <u>Termination of Distillation System Operation</u></p>	<p>reserves the right to terminate this agreement upon 60 days written notice to Clayton. If Sigma exercises this option, Sigma will dismantle and remove the distillation system or Clayton will at the direction of Sigma dismantle the distillation system at the rate of \$8.00/ man hour. If Sigma chooses not to remove the system Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system.</p>

Clayton (Clayton Chemical Company)
<p>20' x 55'</p> <p>will provide sufficient personnel to maintain all utilities necessary for the operation of the distillation system. Such personnel will be under the direction of Clayton.</p>
<p>will supply steam, electricity and cooling water necessary for the operation of the distillation system barring unforeseen equipment failures or an act of God. Clayton will provide a sewer for cooling water and condensate. If there are interruptions in the utilities supplied to the distillation system, every reasonable effort will be made by Clayton to promptly restore these services.</p>

reserves the right to terminate this agreement upon 60 days written notice to Sigma. If Clayton exercises this option, then a) minimum yearly charges (see below) will be waived, and b) Sigma will dismantle and remove the distillation system or Clayton will at the direction of Sigma dismantle the distillation system at no charge to Sigma. If Sigma chooses not to remove the system, Clayton may purchase it from Sigma at a price to be negotiated. If not purchased, Sigma will remove the system.

The following charges apply for operation during normal business hours of Clayton Chemical, 8AM to 4PM, Monday thru Friday, except for normal Clayton Chemical holidays.

Sigma Chemical agrees to pay Clayton Chemical for the use of the plant space and utilities services supplied by Clayton at a charge of \$100.00 per shift or fraction thereof for operation of the distillation system. ~~Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of five cents per gallon.~~

10¢/gal. Acetone & 20¢/gal Alcohol.

The following charges apply for operation beyond normal business hours.

Sigma Chemical agrees to pay Clayton Chemical for the use of plant space and utilities services supplied by Clayton at a charge of \$208 per shift or fraction thereof for operation of the distillation system, and in addition Sigma agrees to pay Clayton Chemical for finished products shipped from Clayton a charge of five cents per gallon.

Should Clayton Chemical be working beyond normal business hours, then Sigma Chemical will be permitted to operate the distillation system for the normal business hours charges. Should Sigma Chemical require additional processing time at the end of the normal business hours to complete a distillation operation then Sigma Chemical may be permitted up to one (1) hour extended operation at the rate of \$10.50 per hour ~~plus five cents per gallon of finished product shipped from Clayton.~~ The additional processing time will not be permitted when the Clayton Plant requires blowdown for overnight freeze protection, as determined by Clayton.

~~When requested by Sigma Clayton will provide engineering for assistance in design support of operations at the rate of \$25 per man hour subject to availability.~~

Clayton will submit to Sigma Chemical a monthly report in the form attached for all charges occurring during the previous month by the 5th of the month. Sigma Chemical will remit to Clayton Chemical payment in full within 10 days after receipt of the report.

Sigma guarantees to pay Clayton a minimum fee of ~~\$2,500~~ ^{4,000} per year for the operation of the distillation system, ~~starting upon completion of the distillation system but not later than March 1, 1974 and including one year later.~~ Should the total operation charges (shift fee plus gallon charges) not equal or exceed ~~\$2,500~~ ^{4,000}, Sigma will pay the difference up to \$2,500.00 at the conclusion of the one year period.

Any amount due on the yearly minimum charges will be paid by the 10th day of the month following the conclusion of the 12 month period.

Should Sigma Chemical terminate this agreement, Sigma agrees to pay Clayton Chemical an amount equal to the yearly minimum charges of ~~\$2,500~~ ^{4,000} less the cumulative charges paid to Clayton Chemical thru the date of termination of operations.

~~This agreement is conditional upon Sigma Chemical getting all necessary permits and insurance to operate the distillation system. If such permits and insurance are not obtained by March 1, 1974, Sigma Chemical may cancel this agreement without liability to pay Clayton Chemical any minimum yearly charges.~~

This agreement between Clayton Chemical and Sigma Chemical is renewed automatically at the conclusion of each 12 month period unless termination notice is given in accordance with the provisions set forth in the section on termination.

If the above meets with your approval, please sign one copy and initial the drawing and return.

Sincerely,

Agreed *[Signature]* Tom Cori
Sue Haney
Clayton Chemical Company
Date

Agreed *[Signature]*
Tom Cori
Sigma Chemical Company
Date 12/15/73

SIA-000019

[Circular Stamp]
[Signature]
5-3-78

Supplemented Billing Form by Clayton Chemical

Charges for the operation of the distillation system

To Sigma Chemical -

During the month of _____, 197__, Sigma Chemical operated the distillation system as follows:

1. On the Following Dates: _____, the distillation system was operated during normal business hours. The total number of normal business hour shifts was _____. The charge is \$104 per shift. The total is _____ x \$104 = \$_____.

2. On the Following Dates: _____, the distillation system was operated beyond normal business hours. The total number of shifts beyond normal business hours was _____. The charge is \$208 per shift. The total is _____ x \$208 = \$_____.

3. On _____ date _____ gallons of finished products were shipped from Clayton.

_____	_____
_____	_____
_____	_____
_____	_____

total gallons _____ x five cents per gallon = \$_____

4. _____ Hours of labor were supplied by Clayton @ \$8.00 per man hour. The total is _____ x \$8.00 = \$_____.

5. Charges for additional processing time @ \$19.50 per hour. The total number of hours was _____. The total is _____ x \$19.50 = \$_____.

6. Engineering charges. Total engineering man hours was _____. The total is _____ x \$25.00 = \$_____.

7. Item 1 is \$ _____
8. Item 2 is \$ _____
9. Item 3 is \$ _____
10. Item 4 is \$ _____
11. Item 5 is \$ _____

The total billing for the month of _____ is \$ _____

S/A-000020